PATENT

Docket No.: 1743/192

## IN THE CLAIMS:

Please cancel claims 3-5, amend claims 1-2, and add new claims 6-9 as follows:

- 1. (Currently amended) A spectrophotometer having
- a light source for emitting an optical beam,
- a photodetector that changes in sensitivity with changes in applied voltage,
- an analog-to-digital converter by which electrical signals from said photodetector are converted into digital signals,
- a digital storage means for storage of said digital signals corresponding to the light of said beam, and

a sensitivity control means for controlling the sensitivity of a voltage applied to said photodetector so that the signal values of said digital signals stay within a predetermined range,

wherein the spectrophotometer is characterized in that said sensitivity control means is further equipped with a sensitivity correction data storage means by which sensitivity correction data for adjusting the sensitivity photodetector is stored for each wavelength, an applied voltage storage means for previously storing said applied voltage corresponding to a wavelength thereof, said applied voltage being corrected so as to be in a proper range, wherein and a sensitivity correction means for adjusting the sensitivity of said photodetector by applying the sensitivity correction data storage means

when measuring a sample, a voltage value corresponding to said wavelength to be measured is read out from said applied voltage storage means so as to apply a voltage having said voltage value to said photodetector.

- 2. (Currently amended) A spectrophotometer having
- a light source for emitting an optical beam,
- a beam splitting means by which the beam that has been emitted from said light source is

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split into two beams,

a photodetector that changes in sensitivity with changes in applied voltage,

an analog-to-digital converter by which electrical signals from said photodetector are converted into digital signals, and

a digital storage means for storage of said digital signals corresponding to the light of said two beams,

a sensitivity control means for controlling the sensitivity of said photodetector so that the signal values of said digital signals stay within a predetermined range, and

a calculation means for calculating the ratio of the digital signals corresponding to the two beams stored into said digital storage means,

a control means for controlling said applied voltage to said photodetector and for calculating a ratio of the outputs of said photodetector corresponding to said two beams,

wherein the spectrophotometer is characterized in that said sensitivity control means is further equipped with a sensitivity correction data storage means by which sensitivity correction data for adjusting the sensitivity of said photodetector is stored for each wavelength, an applied voltage storage means for previously storing said applied voltage corresponding to a wavelength thereof, said applied voltage being corrected so as to be in a proper range,

wherein and a sensitivity correction means for adjusting the sensitivity of said photodetector by applying the sensitivity correction data stored into said sensitivity correction data storage means when measuring a sample, a voltage value corresponding to said wavelength to be measured is read out from said applied voltage storage means so as to apply a voltage having said voltage value to said photodetector.

6. (New) A spectrophotometer as set forth in claim 1, wherein when said voltage value is stored in said applied voltage storage means, said sample is measured with a wavelength movable velocity limited within a predetermined range.

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7. (New) A spectrophotometer as set forth in claim 2, wherein when said voltage value is stored in said applied voltage storage means, said sample is measured with a wavelength movable velocity limited within a predetermined range.

- 8. (New) A spectrophotometer as set forth in claim 1, further comprising:
  a display for displaying a state and result obtained by measuring the sample, and
  when measuring the sample, if said voltage value is not stored in said applied voltage
  storage means, a warning message is displayed on said display.
- 9. (New) A spectrophotometer as set forth in claim 2, further comprising: a display for displaying a state and result obtained by measuring the sample, and when measuring the sample, if said voltage value is not stored in said applied voltage storage means, a warning message is displayed on said display.